

THE CALL FOR CHANGE: THE FUTURE OF THE AIR OPERATIONS CENTER

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APPROVAL

The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

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ABSTRACT

The air component commander currently uses the air operations center to plan, execute, and assess air operations within his area of responsibility. The AOC structure identified in joint and Air Force doctrine starts with the idea that all aspects of the air operations center are located in the same place. However, a question raised in the past few years based on the ongoing conflicts concerns the idea of split AOC operations. The other services view the AOC as a command and control node with divisions that can be geographically separated to better support their operations.

To examine this problem the methodology used was a problem solution approach. The research starts with a brief look at the history of air operations centers and how the process developed over time. The research then looked at those agencies that interact with the air operations center to include sister service organizations and external extensions of the air operations center. This paper then examines previous examples of how the standard air operations center structure has operated in the past and compares that to the use of split air operations center operations. Also examined were the advantages and disadvantages of each AOC structure to include technological feasibility, opportunity to understanding and contribute to JFC and JFACC's intent, and the impact to other functional component commanders. In conclusion, it was identified that the current standard AOC structure provides the best results to commanding and controlling air operations in a theater-wide area of responsibility.

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Introduction

The AOC is fundamental to what makes us great as an Air Force. If you have a group of airplanes but you don't have an AOC, you don't really have an air force, you have a flying club

-- General Ronald Keys, Former ACC Commander

Background of the Air Operations Center

The idea of command and control of military forces has a long-standing history. Originally, those in charge could only command and control forces within their immediate vicinity. Technological developments affected the function of command and control by allowing it to occur from a greater distance while simultaneously allowing forces to operate across a larger area of responsibility remaining under a single commander. In today's environment, the use of technology is considered a given. The technological benefits from capabilities such as communications and computers, often taken for granted, provided a senior leader with the ability to be the single commander for a large number of assets, located at a variety of dispersed locations within a single area of responsibility. In addition, a commander's ability to use technology for command and control of forces also requires doctrine to guide his endeavor.

The dramatic growth in the use of airpower since its inception in 1903 has complicated debates about command and control. The military incorporated air assets into a variety of functions as aviation technology developed. As that technology matured, the command and control of air assets became a source of contention among the various services. Much of this contention traced its roots back to the pre-independent Air Force days when the Army viewed air assets as a supporting branch to the soldier. The other services, the Navy and Marine Corps, have long seen and continue to view air power as an organic element needed to accomplish their assigned missions. Interservice rivalry, the priority of the role of air assets assigned, and a variety of other reasons made the command and control of air assets a highly debated subject in the Department of Defense over the past fifty years. Today, the debate continues.

The command and control of American air assets initially became a source of contention between different factions of the United States Army. Since the introduction of the airplane to the battlefield in World War I, the question of how best to command and control air assets existed. Initially, air assets were simply an extension of the ground forces and while assigned to ground units provided reconnaissance of the enemy forces. Air advocates quickly identified the capability to employ air assets in an offensive manner and the question of command and control became even more contentious. Eventually, this debate over command and control was one of many factors that resulted in a call for an independent air force with a single aviator in charge of all air assets. The creation of the United States Air Force in 1947 intensified the command and control debate along service lines among the Army, the Navy, and the newly formed Air Force.

The issue of command and control of air assets continued after the establishment of the Air Force. The Air Force, made up from those who had experience serving in the Army Air Force and the establishment of the Air Force in 1947, pushed this debate into a service versus service issue. The threat of combat operations on the Korean peninsula sparked the need for resolution. The interservice debate was spurred by the new independent Air Force's attempt to establish itself as an equal partner among the services and saw this disagreement as a chance to prove itself as a independent service against its peers. During the Korean War, the command and control of air assets was initially conducted along service lines, with each service tasked to a separate geographic area where they could operate.¹ This arrangement continued through most of the Korean War until General Anderson and Admiral Clark directed the Air Force and Navy to work together in a Joint Operations Center.² The direction to work together resulted from the Navy's inability to assure requested air strikes would actually occur.³ The lessons of the difficulties of conducting joint air operations via service lines, however, did not carry over to Vietnam, where the services once again worked independently by service separated by geography when conducting air operations.

¹ Conrad C. Crane, *American Airpower Strategy in Korea 1950-1953* (Lawrence, KS: University Press of Kansas, 2000), 28.

² Robert F. Futrell, *The United States Air Force in Korea* (Washington D.C.: U.S. Government Printing Office, 1996), 676.

³ Futrell, *United States Air Force in Korea*, 676.

Throughout much of the Vietnam War, both leaders and aviators responsible for the command and control of air assets seemed to have learned very little from the previous uses of airpower in combat. Rather than assigning airplanes to Army ground units like during World War II, the United States Air Force employed air assets using geographic area assignments to deconflict air operations.⁴

The reason this command and control structure was established resulted from a variety of issues. Internally the Air Force was staking its credibility as an independent service on the nuclear mission resulting in the growth of Strategic Air Command, which left little time or desire to debate theater command and control. Externally the other services still saw airpower as a support branch. The airmen managing air assets proved unable to incorporate lessons of command and control from the Korean War and were operating under a similar employment design in the Vietnam War, which had been a source of frustration just a few years earlier in Korea.

Command and control of air assets via separation by service continued throughout much of Vietnam with only a few instances where the services worked together on select targets.⁵ This time, however, the difficulties experienced with command and control motivated those who fought in Vietnam. The memory of the difficulties experienced with command and control during Vietnam guided the Air Force toward a different solution when those who flew in Vietnam were finally in positions to make changes. One of these individuals, General Chuck Horner, would command the air assets in the next large conflict where air played a crucial role: Desert Storm. General Horner commanded what is now recognized as the first air operations center, known at the time as the tactical air control center. The United States Air Force developed this facility as an operational level command and control node to plan, task, execute, monitor and assess air operations of assigned and attached forces.⁶ The method of command and control established during Desert Storm built the foundation for modern operational level command and control. Today for example, the United States Air Force Central Command AOC is

⁴ Thomas A. Hughes, *Overlord: General Pete Quesada and the Triumph of Tactical Air Power in World War II* (New York, NY: The Free Press, 1995), 86.

⁵ General William W. Momyer, *Air Power in Three Wars* (Washington D.C.: Department of the Air Force), 91.

⁶ Air Force Doctrine Document 2, *Operations and Organization* (2007), 69-70.

located in Qatar, where all planning, executing, and assessing are being accomplished for theater-wide air, space, and cyberspace operations.

A Review of Doctrine

Doctrine should be the initial starting point to any military employment construct for the military. Various doctrine documents discuss command and control of military forces. For this study, Joint Publication 3-30 *Command and Control for Joint Air Operations* serves as a starting point. In essence, the effective command and control of air assets provides the national leadership a range of options across any type of operation, ranging from peacetime support to a major theater conflict.⁷ The military usually presents the command and control structure, as stated in Joint Publication 3-30, in the form of a joint force air component commander (JFACC) “to establish unity of command and unity of effort.”⁸ The JFC selects a JFACC based on the “component commander with the preponderance of forces to be tasked and the ability to plan, task, and control joint air operations.”⁹ Since the Air Force component commander will usually be the JFACC based on joint publication doctrine criteria an operational level command and control node was needed from which the JFACC could exercise his responsibilities, as delegated by the joint force commander. The evolution of the JFACC construct and the roles and responsibilities this joint functional commander performs for the JFACC helps explain why the Air Force established the air operations center (AOC) to command and control air assets. All services did not initially accept the establishment of the AOC by the United States Air Force as the central joint command and control element. The services disagreed on the use of air assets in military operations. The other services, staunch in their beliefs of airpower as a supporting element to their respective mission, did not desire to relinquish control of their air assets to the JFACC operating out of an AOC. Therefore, the airmen pushing the AOC concept experienced many conflicts and inter-service debates before it was established and recognized within joint circles. The recognition of the usefulness and then acceptance of the AOC traveled a long road since

⁷ Joint Publication 3-30, *Command and Control for Joint Air Operations* (2010), I-1.

⁸ Joint Publication 3-30, *Command and Control for Joint Air Operations* (2010), xi.

⁹ Joint Publication 3-30, *Command and Control for Joint Air Operations* (2010), xi.

the experiences in the Korean and Vietnam War identified flaws in previous command and control structures.

With the on-going conflicts in the Middle East, United States Central Command (USCENTCOM) is questioning whether an alteration of the current AOC structure is needed to better support operations when there are two conflicts in a single area of responsibility (AOR), as in Iraq and Afghanistan. Continuing tension between the ground forces and the CAOC (Combined Air Operations Center) over requested air support make this an issue of great concern. As Lieutenant Colonel Clint Hinote, former strategy division chief in the Central Command Air Forces CAOC, pointed out in his monograph, *Centralized Control and Decentralized Execution*, “It drives ground commanders nuts when they make the request and wait for an answer only to have the request denied while their soldiers remain in harm’s way. Some of this frustration arises from a lack of understanding of the tactical air control system and the priorities of the overall joint commander. It is real nevertheless, and it often expresses itself in an accusation that ‘the air force isn’t supporting us!’”¹⁰

There are, of course, different ways to command and control air operations for the JFC and the ground components. One school of thought is to relocate the strategy division of the AOC to Baghdad so it would be co-located with the planning of ground operations. Advocates of this change believe it will make air planning more responsive to ground planning. Afghanistan could also have a similar type of setup.

Another method currently exercised and used in combat operations is the standard AOC. It directs all the divisions to be located in the same geographic place.¹¹ Perhaps, the standard practice, although questioned by other military services, actually provides the most reasonable solution for the combined forces air component commander (CFACC) to command and control air operations throughout an entire AOR.

Airmen have a unique perspective on the command and control of air operations. This view results from what General Henry “Hap” Arnold called “airmindedness,” which he defined thusly, “The perspective of Airmen is necessarily different; it reflects the

¹⁰ Lieutenant Colonel Clint Hinote, *Centralized Control and Decentralized Execution: A Catchphrase in Crisis?* (Maxwell Air Force Base, AL: Air Force Research Institute, 2009), 22.

¹¹ General T. Michael Moseley, “Air Forces Forces: Command and Control Enabling Concept (Change 2)”, 10.

range, speed, and capabilities of aerospace forces, as well as threats and survival imperatives unique to Airmen.”¹² This perspective of air operations is what makes centralized command and control of air forces unique to airmen, and makes distinct the mechanism they developed, the AOC, to accomplish this task.

A look ahead

The purpose of this paper is to research the need and feasibility of geographically separating AOC activities/responsibilities to support air operations. Chapter 1 provides a review of the command and control arrangements of air assets during the Korean and Vietnam Wars with an examination of how these conflicts influenced the setup for Desert Storm air operations. This look at the AOC includes the development of the AOC as a standard node to command and control the air assets in a respective AOR, providing an air component an organized capability to plan, execute, and accomplish assessment of air operations. The chapter concludes with a brief look at the AOC structure by examining the significant aspects of the current AOCs. With its historical and current air operations structure and supporting Air Force doctrine, this chapter provides a foundational base before moving into the case studies, which make up Chapter 2 and Chapter 3.

Chapter 2 examines Operations Enduring Freedom and Iraqi Freedom to understand and baseline the standard AOC structure. The Air Force has benefited from using a standard AOC construct in various conflicts, and exercises to establish processes and build experience. To establish a baseline, this examination begins with a thorough review of Air Force doctrine on command and control. A case study analysis of the current conflicts in Iraq and Afghanistan follows the examination. Additionally, this case study allows the reader to build a composite understanding of the AOC situation building upon the historical perspective provided in Chapter 1 and enhanced by the information discussed in Chapter 2.

Chapter 3 examines the other way the Air Force has utilized the AOC structure. The examination of the split AOC construct accomplished through case study analysis uses a compare and contrast approach to analyze the case material in this chapter with that presented in Chapter 2. Much like the previous chapter, this one uses case study

¹² Air Force Doctrine Document 2, *Operations and Organizations* (2007), 2.

analysis to examine the methods used to command and control air assets in operations and exercises. The examples of the split air operations center structures explain the use for each respective conflict and its context. The purpose of this examination is to determine if the Air Force gained any command and control capability using a different AOC structure.

The final section, Chapter 4, provides a synopsis of the AOC construct along with the implications of utilizing different AOC formulations. These implications include thoughts on how the today's air operations center structure supports the current and possible future conflicts in comparison to other possible options such as "Joint Forces Air Component Commander Forward" or the "Split Air Operations Center".

The Air Force developed the AOC construct motivated by the command and control mistakes from Korea and Vietnam. Today, the United States is fighting two conflicts in the Middle East, while maintaining a capability for other events within the Central Command AOR--balancing air assets is essential. Additionally, the Air Force is facing a dramatic decrease in available combat air assets as the expected numbers are going to decrease to 1,400 in 2030 from a high of 4,400 just twenty five years ago.¹³ This decrease in air assets will only make the AOC more valuable in supporting the air requests, which, as recent history shows, will not decrease. As the Air Force prepares to move ahead with a smaller force, the need for unity of command and unity of effort has never been greater and the AOC is the mechanism to accomplish the mission. Now the only question that remains is how the Air Force is going to structure the AOC.

¹³ Air Force Association, "Government Relations", <http://www.afa.org/grl/PDFs/InventorySlides.pdf>.

Chapter 1

The Air Operations Center – Where Did It Come From

I will tell you that a commander without the proper C2 assets commands nothing except a desk. You must have the ability to communicate with the forces under your command. You must have the ability to exchange information with them freely, frequently, and on a global basis.

-- General Ronald R. Fogleman, CSAF, 1994-1997

The history of command and control with the Air Force is not a smooth path. The Air Force has tried many methods to find an appropriate structure to achieve this task. A look at the development of the AOC from the Korean War through the current conflicts provides a snapshot of the many different methods tried to command and control air operations. The AOC's focus is at the operational level of war trying to bridge the gap between strategic level guidance and tactical level execution. This chapter provides a brief look at the history of the AOC based on command and control difficulties experienced in the Korean and Vietnam Wars resulting in modern AOC structure.

The United States military has historically been great at tactical war, but has struggled at linking the strategic level to the tactical level. The operational level of war is the piece to accomplish the linkage between the strategy and tactical level. As Shimon Naveh states in his book, *In Pursuit of Military Excellence*, this level of warfare was not needed until the early nineteenth century when the size of armies began increasing beyond the ability of a single general to control them directly.¹⁴ The operational level is often the most difficult level to excel at because of the bridging of sometimes-unclear strategic level guidance that needs to be tied to the employment of service members and their capabilities on the ground, sea, air, space, and cyberspace. The difficulty in bridging the gap between the two levels leads to the need for operational level art. There is no standard checklist for how to accomplish this level of warfare, as it is often the

¹⁴ Shimon Naveh, *In Pursuit of Military Excellence* (Oxon, OX: Frank Cass Publishers, 1997), 1.

result of experience on how to use the military. However, the importance of this level of warfare cannot be overstated. Without the operational level, military forces could be employed without tying tactical actions to desired strategic goals.

Historically, the United States Air Force has struggled to achieve success at the operational level. However, since the conclusion of the Vietnam conflict the Air Force has advocated an operational level approach to bridge the gap between a strategic level that often suffers from ambiguity and a tactical level where success seems more certain. The system designed through extensive trial and error to bring the Air Force operational level success is the air operations center. Its primary purpose is to provide for the command and control of air assets. Although the name and organizational structure has changed over time, the Air Force's core principle of centralized control and decentralized execution has been a benchmark for justifying the development and employment of the air operations center.

Although the Korean War occurred over fifty years ago, some of the same problems encountered in this conflict concerning the command of air assets still exist today. This clash provides a foundation for studying Air Force command and control because it was the first conflict for an independent United States Air Force.

Prior command and control experience, such as during World Wars I and II, although of some value, saw Army ground commanders use air forces as an extension of their surface units. Experience in the Korean War helped leaders identify three particular areas that the Air Force still needed to work on at the operational level. First, the Army and Navy did not recognize the Air Force's established structure to conduct air operations. Second, the Air Force may not always have control of all air assets within the theater of operations. Lastly, the Korean War demonstrated how problematic successful air employment could be when a system for prioritizing air operations was lacking. Was the priority the tactical level employment to support ground forces, or was it strategic level bombing to support theater-level goals? All three of these challenges are still at work today and play a significant role in how the air operations center should be employed by the JFACC.

In the early 1950s, the Air Force believed it had developed a solution to controlling and conducting air operations. A joint theater command post exercise in

April 1950 sought to test theater-wide connectivity among command posts, but it failed because of communications issues.¹⁵ Through this exercise, the Air Force attempted to establish an air to ground operational link. Considering the results of this exercise, the then acting Far East Air Force Vice Commander, General Partridge, proposed a solution to the communication issue between air and ground command posts. General Partridge's idea was to establish a joint operations center, jointly manned by the Army, Navy, and Air Force. Far East Command did not approve this idea avoiding a perception of favoring one service over another since this idea was entirely Air Force generated.¹⁶ This recognition of the need for a joint operations center to command air operations and prevent communication problems, although not approved at the time, would be influential later. The Air Force, at this point, recognized a need for an established command center to provide centralized command of air assets; however, the other services did not see this need -- hence the disapproval from Far East Command.

The Korean War also showed that not services, in particular the United States Navy, supported all of the newly established independent United States Air Force's ideas. Early in the Korean War the senior Air Force leaders proposed to General MacArthur that all Air Force and Navy air assets be commanded by one single officer, similar to the modern day JFACC, and in this case by an Air Force general.¹⁷ General MacArthur supported the Navy in a disagreement that would lead to problems between the two services later in the war. The Navy, along with the Marine Corps, resisted this Air Force proposal because, in their view, their air assets were organic to their mission, risking their availability when the Navy or Marines needed them.¹⁸ The quick look at the numbers support the Marine point of view as it took 10 minutes for Marine assets to provide close air support compared to up to 40 minutes for the Air Force.¹⁹ While this was valid for the short term, this service centric view resulted in a missed opportunity for potential progress in the joint arena.

¹⁵ Robert F. Futrell, *The United States Air Force in Korea* (Washington D.C.: U.S. Government Printing Office, 1996), 61.

¹⁶ Futrell, *United States Air Force in Korea*, 61.

¹⁷ Futrell, *United States Air Force in Korea*, 49.

¹⁸ Futrell, *United States Air Force in Korea*, 50.

¹⁹ Futrell, *United States Air Force in Korea*, 82.

The combination of all air assets under a single commander, regardless of service, could have provided much-needed benefits to air operations in Korea. Centralized control of air assets would have reduced targeting confusion. The separation of air assets along service lines, combined with the continuing communication problems between the services as initially highlighted in 1950, presented a problem regarding target selection and assessment. The lack of the services collectively planning operations and communicating the results to each other hindered operations. The Naval Forces Far East retained control of their air assets even when striking targets inside Korea. Following common practice for maritime operations, the Navy was operating independently and was often out of communication with the Far East Air Forces for days at a time.

This command and control structure presented a problem for the Air Force from two perspectives. First, the selection of targets required considerable coordination so that each service understood what the other was attacking. The establishment of a biweekly targeting board reduced this problem, but identifying and selecting targets in two-week intervals did not eliminate all the confusion between the two air elements. On more than one occasion, one of the services had to cancel an air strike during their tactical level planning because the other service had already struck the target.²⁰ The second problem was a simple issue of communication concerning the progress of air operations. The two services were unable to communicate on a regular basis because of the limited communication capabilities.

This confusion between the services increased because of the direction given by Far East Command. As stated by Conrad Crane in *American Airpower Strategy in Korea 1950-1953*, "MacArthur's headquarters had given the aircraft carrier *Valley Forge* vague orders to support ground troops but had not coordinated with FEAF beforehand. CINCFE's instructions of mid-July delegated 'coordination control' to FEAF when it operated with naval air on assigned missions, but that vague term meant different things to each service and led to considerable misunderstanding."²¹ These types of problems continued between the services because of differences in how they planned to employ air assets, the different technological focus for each service, and differing attitude towards

²⁰ Conrad C. Crane, *American Airpower Strategy in Korea 1950-1953* (Lawrence, KS: University Press of Kansas, 2000), 28.

²¹ Crane, *American Airpower Strategy in Korea 1950-1953*, 28.

air power employment. Additionally, the lack of coordinated planning between the services led to difficulties in the actual flying operations. FEAF ground controllers experienced problems with Navy air assets because of the differences in terminology. Another problem the Air Force encountered with Navy operations was how they utilized their air assets. The Navy, because of the design of its carriers, usually employed their assets in large groups often overwhelming unprepared ground controllers.²² These difficulties were not acceptable for either service. The Navy and Air Force held a conference to iron out some of these problems resulting in the establishment of some informal agreements between the two services. These agreements assigned the Navy's priorities as close air support under Fifth Air Forces tactical control and then interdiction type missions. However, these informal agreements were not satisfactory throughout the Navy. The Navy still viewed air assets as organic to their mission with fleet defense the primary mission. Their leadership claimed that the Air Force had bullied the Navy into accepting the agreement by outranking the Navy at the meeting with the use of four USAF general officers versus a single Navy captain.²³

This type of debate continued between the two services throughout the Korean War. Eventually, the Navy sought public support for their cause on how air assets should be assigned and used by publishing an editorial in the *Baltimore Sun* blaming the problems on poor Air Force joint air operations procedures. General Partridge continued to debate with the Navy until eventually determining that the only solution was to separate the services by geographic area. The country separated into geographic regions allowed for the services to conduct air operations without conflicting with other air assets. As stated in *American Airpower Strategy in Korea 1950-1953* "one historical study of joint air operations in Korea describes accounts of Air Force-Navy cooperation as reading more like 'a summary of treaty negotiations between uneasy allies' than a record of sister services working together against a common foe."²⁴ This uneasy cooperation between the services would continue for many more years while keeping air operations from reaching their full potential.

²² Crane, *American Airpower Strategy in Korea 1950-1953*, 29.

²³ Crane, *American Airpower Strategy in Korea 1950-1953*, 28.

²⁴ Crane, *American Airpower Strategy in Korea 1950-1953*, 30.

Eventually, service leadership directed the Air Force and Navy to work together to accomplish the surveillance and continued neutralization of the North Korean hydroelectric plants.²⁵ The effort to strike these plants built a relationship between the two services because the continued effort to keep them neutralized required assets from both services.²⁶ This relationship eventually led the Navy to allow the Air Force to direct Navy air strikes, as required. Ultimately, in the last weeks of the Korean War, Navy personnel were included in the Joint Operations Center. Although the services had a deep rift concerning air assets for the majority of the Korean War, towards the end the services progressed in solving these problems.

The problems with command and control of air assets were not isolated to the interservice rivalry between the Air Force and the Navy. Issues also surrounded the use of allies' air assets during the Korean War. While some allies used American made airplanes that eased some of the problems, other allies, such as the British, used airplanes that Americans were unfamiliar with, which caused fratricide problems as American pilots mistakenly identified allies' aircraft for enemy airplanes.²⁷ This lack of coordinated planning between the two countries and the associated fratricide resulted from a lack of a single entity leading the air planning. Collaborative planning could have minimized the fratricide issue, which would have made the air effort more effective.

The lack of cooperation in the command and control arena continued into the Vietnam War. Ian Horwood best describes this situation in *Interservice Rivalry and Airpower in the Vietnam War* by stating "the United States' Army and Air Force entered Vietnam War with unresolved doctrinal differences regarding command arrangements and appropriate strategies for limited war. They pursued their own agendas in Southeast Asia, and the persistence of such rivalry within the context of the war was inherently inefficient, but they did so in the conviction that their own designs provided the swiftest route to victory."²⁸ One of these designs during the Vietnam War was to again separate the services via geographic region of the country to allow them to operate independently when conducting air strikes.

²⁵ Futrell, *United States Air Force in Korea*, 488.

²⁶ Futrell, *United States Air Force in Korea*, 488.

²⁷ Crane, *American Airpower Strategy in Korea 1950-1953*, 30.

²⁸ Dr. Ian Horwood, *Interservice Rivalry and Airpower in the Vietnam War* (Fort Leavenworth, KS: Combat Studies Institute Press, 2006), 63.

However, there had been enough agreement on certain issues in Korea that the fight for command of air assets that existed throughout much of the Korean War did not appear during the Vietnam War. First, the Air Force and Navy had reached an agreement in Korea on how air operations should be conducted based on an idea of coordination control.²⁹ The services agreed to the concept of coordination control because it “met the minimum demands of each service component, plus a return to the route package system (geographic demarcation of respective target areas) that characterized some Korean operations.”³⁰ In hindsight, this agreement did not solve the long-term problems of command and control, but in the short term allowed the services to conduct air operations. Another reason the Air Force was reluctant to fight the issue of control of all air assets was that the commander of all forces in the Pacific was a Navy admiral, which left the Air Force little hope of mounting a major fight for centralized control of all Navy assets. The final reason for this uneasy peace between the services was that each service now realized that the other had their own unique doctrine demands affecting their position concerning command and control.³¹ The separation of air assets via service lines resulted in each service tasked for a selected area of the country. This method known as route packages is shown in figure 1.

²⁹ James A. Winnefeld and Dana J. Johnson, *Joint Air Operations: Pursuit of Unity in Command and Control 1942-1991* (Annapolis, MD: Naval Institute Press, 1993), 77.

³⁰ Winnefeld, *Joint Air Operations*, 77.

³¹ Winnefeld, *Joint Air Operations*, 78.



Figure 1. United States route packages in North Vietnam

Source: Reprinted from www.nationalmuseum.af.mil

These route packages provided each service with a respective part of the country where they could conduct air operations without coordinating with other services.

While at initial glance this concept may make sense, the command and control perspective exposes the problems. First, the use of air assets via service lines instead of overall needs of the operation does not allow for the most efficient use of assets to achieve objectives. The Air Force experienced this problem in Vietnam as described in *Airpower in Three Wars*: “the 7th Air Force diverted too many sorties into Route Package I when weather prevented strikes in Route Packages V or VI.”³² This vectoring of airpower from one sector to another discards another value command and control

³² General William W. Momyer, *Air Power in Three Wars* (Washington D.C.: Department of the Air Force), 95.

provides and an ideal the Air Force holds high of being both effective and efficient with its resources. The inability to operate in another sector shows one of the fundamental flaws of the route package idea. When weather affected air assets in one sector they were not pushed to the sector most in need but to a sector controlled by their service. A better use of assets along with joint planning would have allowed them to operate in another service's sector. Additionally, with limited resources the lack of an overall commander for all air assets invites shortages to occur, especially when each service wants to prove their effectiveness independently. The book *Airpower in Three Wars* highlighted this problem with the example of Task Force-77's inability to provide continuous 24-hour coverage as desired because of the large number of assigned route packages.³³ TF-77, from a pure number of assets approach, had the capability to accomplish this mission but the division along service lines did not necessarily account for the different types of aircraft along with the associated range that each asset was able to cover.

The eagerness of each service to highlight its capabilities resulted in a lack of an overall air strategy to support the campaign strategy. Without a doubt, each service focused on showing their relevance in contributing to the conflict, since this would translate to a larger budget for this respective service. While the Air Force was the new service and had captured the largest piece of the Department of Defense budget because of the nuclear mission, the other services had to show they also had value. This contest of relevance provided another reason to fight the idea of operating with all air assets under a JFACC in a predominantly Air Force-centric command center.

One issue that occurred in Vietnam, but not in Korea, was the topic of who all the Air Force air assets would be assigned to while conducting operations in Vietnam. During the Korean War all the Air Force air assets were assigned to the Far East Air Force to include the B-29s assigned from Strategic Air Command (SAC). This was not the case during the Vietnam War, when SAC retained command of all its assets along with their targeting and mission planning. This command arrangement resulted in strategic assets tasked and planned from within the United States while the tactical ones

³³ Momyer, *Airpower in Three Wars*, 95.

were tasked and planned from within Vietnam. Figure 2 shows the line diagram organizational structure used during the Vietnam War.

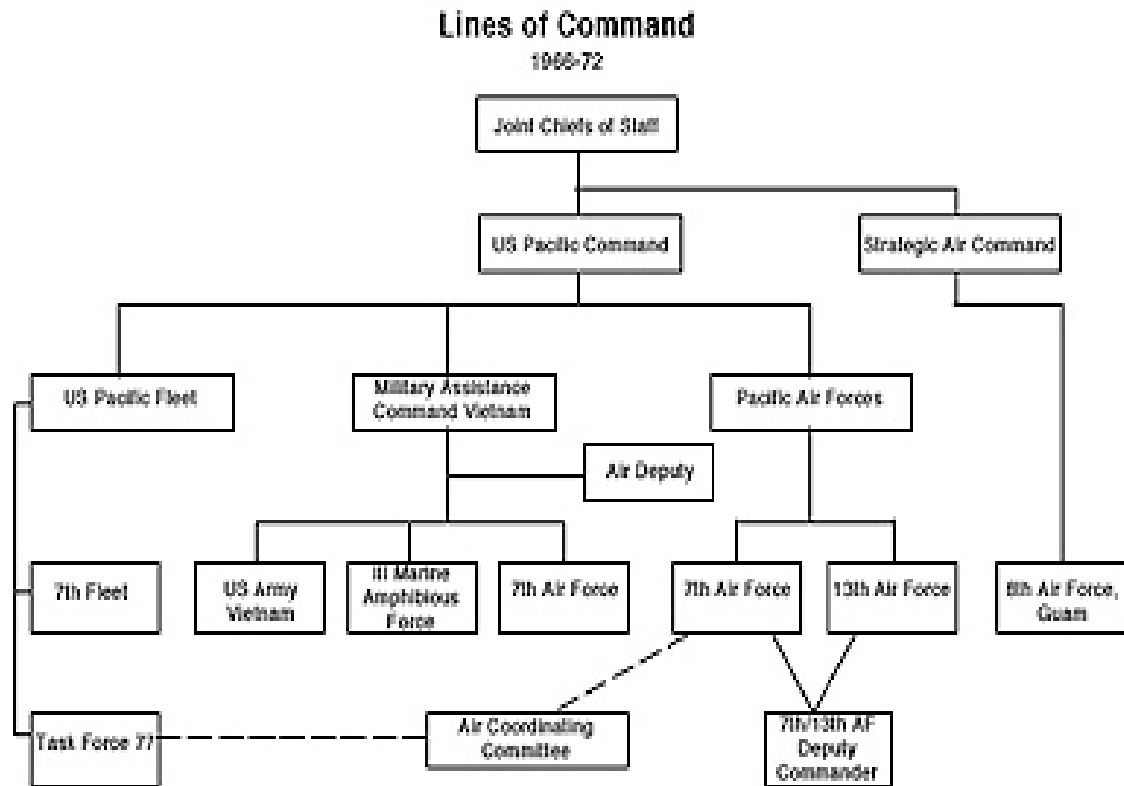


Figure 2. Vietnam Organizational Structure

Source: Reprinted from <http://www.talkingproud.us>

This command structure resulted in the Air Force having two separate air strategies in play during the Vietnam War. The bombers assigned to SAC were conducting a campaign against targets identified as strategic and directed from the highest levels of government. One of the main reasons behind this use of bombers was that airmen were pushing the notion that an Air Force did not always have to be a supporting arm to the Army or Navy.³⁴ Meanwhile, the air assets located in Vietnam were being used in a tactical manner such as providing close air support and air defense type missions. This difference in the use of airpower within a single service was causing problems in the

³⁴ Momyer, *Airpower in Three Wars*, 99.

attempt to provide sound command and control to a theater commander; airmen operating under this construct would long remember these problems.³⁵

The Korean and Vietnam Wars provided many lessons for those guiding and operating in the air domain to learn. Internally, the Air Force changed its focus and leadership from one dominated by the nuclear mission to a more balanced approach with increased importance on conventional weapons. This transformation allowed the development of these lessons at the operational level and it grew into the AOC of today. Externally the Air Force was able to develop a level of understanding with the other services and allies on how best to employ air power from a combined force perspective without losing service identity, which appeased the Marine Corps and Navy who remained concerned with the organic mission of their assets. Without the experiences in Korea and Vietnam, it is doubtful the AOC would exist in its present structure today.

Why an AOC?

Over the years, the Air Force has seen many command structures designed to control its assets. These structures included assigning air assets to army ground commanders as in World War I to Unified Commanders in the United States maintaining control of air assets in Vietnam. Throughout these conflicts in which the Air Force participated, the command and control structure was never the same until the Air Force, along with the other services, and driven by the Goldwater-Nichols Act of 1986, resolved to streamline command relationships for air operations. This resulted in the Air Force identifying forces to support each geographic combatant commander. This effort contributed to the development of air operations centers to provide a capability to command and control air assets at the operational level.

The Air Force expanded the AOC construct over the past 10 years by establishing it as a weapon system, which provides advantages and disadvantages. The benefit of establishing a weapon system is in funding, work force, and recognition. When declared a weapon system the Air Force can identify that system in formal budgets and have funds dedicated to its development. The Air Force develops the work force to operate the weapon system through the establishment of formal training units. In addition, the AOC

³⁵ Tom Clancy and General Chuck Horner, *Every Man a Tiger* (New York, NY: G.P. Putnam's Sons, 1999), 96.

gains recognition when the Service formally declares it a weapon system, speaking to the value and importance the Air Force has in the system.

The drawbacks of declaring a weapon system are reduced flexibility in system design and requirements, and in prioritization compared to other Air Force weapon systems. The declaration of a weapon system takes away the ability to accept ad hoc changes to the system design. In addition, the AOC weapon system must now establish its requirements years in advance in hopes of gaining funding and manpower to operate the system. The final drawback is the AOC weapon system must also compete against other weapon systems that often provide a more tangible effect, such as a bomb, when competing for resources.

What is the AOC?

The air operations center is the Air Force's place to command and control air, space, and cyberspace activities from a centralized location in support of a combatant commander. The Air Force developed the first AOC in preparation for the 1991 Gulf War. Although the use of technology has streamlined some of the AOC processes since then, the current AOC mirrors the organization commanded by General Horner; then known as a Tactical Air Control Center (TACC).³⁶

General Horner built the 1991 version of the TACC from a facility that, previously the Air Force had used to coordinate between air and ground forces. The TACC used for command and control in Desert Storm was originally composed of two functions, which were current plans and current operations. In December 1990 the Air Force reorganized the TACC "because of evolutionary changes taking place rather than a 'thought-out process,'" according to General Horner.³⁷ At this time, the air operations were transitioning from Desert Shield to Desert Storm and a change in focus from defensive to offensive operations occurred.³⁸ The "old" TACC transformed into an AOC with four divisions, consisting of: Guidance Apportionment Targeting, Air Tasking Order, Airborne Command Elements, and Component Liaison. Today, the AOC has

³⁶ Clancy, *Every Man A Tiger*, 207.

³⁷ Mark D. Mandeles, Thomas C. Hone, and Sanford S. Terry, *Managing "Command and Control" in the Persian Gulf War* (Westport, CT: Praeger Publishers, 1996), 26.

³⁸ Mandeles, *Managing "Command and Control" in the Persian Gulf War*, 26.

grown in responsibility and size and currently it consists of five functions/divisions.³⁹ A key product produced from an AOC, regardless of name, is the Air Tasking Order. This document is an order from the CFACC, which directs all tasked assets under his command to their mission during a set timeframe (usually 24 hours).

Currently, the Air Force has a number of AOCs located around the world. The Air Force designates AOCs as either being a functional or falconer design, depending on their varying functions. The service defines a functional AOC as a “command and control center that supports global functional requirements, such as transportation”, while it describes a falconer AOC as the “weapon system through which the JFACC exercises command and control of air and space forces”; it also serves as the “senior element of the Theater Air Control System.”⁴⁰ Currently the falconer AOCs are located geographically to support each geographic combatant commander with some being located within the area of responsibility and others located at other military facilities with close proximity to the AOR. For example, the AFCENT AOC is located in Qatar in the CENTCOM AOR while AFSOUTH AOC is located at Davis Monthan Air Force Base, Arizona, alongside 12th Air Force Headquarters outside the AOR but geographically close enough to provide support. The functional AOCs are usually co-located with an Air Force mission area headquarters entity. For example, the Joint Space Operations Center (JSpOC) is located alongside 14th Air Force, the Air Force’s only space numbered air force, at Vandenberg Air Force Base, California and the Tanker Airlift Control Center, is located along side the Air Mobility Headquarters at Scott Air Force Base, Illinois. Although the mission, name and location for each AOC vary, they all have a very similar structure.

The majority of the AOCs are composed of five divisions to accomplish all planning, executing and assessing air, space and cyberspace operations for the CFACC. These five divisions are strategy; plans; combat operations; air mobility; and intelligence, surveillance and reconnaissance. AOCs base their division composition on mission requirements. For example, the JSpOC operators opted for only four divisions because they had no requirement for an air mobility division. Each division is responsible for a certain part of the air campaign in support of the JFC’s overall theater campaign.

³⁹Mandeles, *Managing “Command and Control” in the Persian Gulf War*, 26.

⁴⁰ Air Force Instruction 13-1 Volume 3, *Operational Procedures-Air and Space Operations Center* (2005), 5.

The strategy division is responsible for “developing, refining, disseminating, and assessing the C/JFACC air and space strategy.”⁴¹ This division is responsible for initiating the planning for air operations and ends each planning cycle with assessment, restarting the planning cycle.

The combat plans division “applies operational art to develop detailed execution plans for air and space operations. Based on C/JFC objectives and apportionment, the Air Operations Directive (AOD), forces made available for C/JFACC tasking, and operational environment, these execution plans apply specific air and space capabilities and assets to accomplish C/JFACC tasks in fulfillment of the C/JFC mission.”⁴² This division is responsible for further developing the guidance pushed by the strategy division. Within this division, operators identify the targets and assign air resources to strike packages.

The third AOC division is the combat operations division, which the JFACC tasks with “monitoring and adjusting execution of the current ATO.”⁴³ The combat operations division is where the JFACC puts his plan into action. Depending on the situation, operations directors assign air assets to execute a new mission, as required. For example, the combat operations division could change the mission from one of strategic attack to an emerging responsibility such as supporting a call from troops in contact with the enemy.

The next AOC division is the air mobility division (AMD) which, “in coordination with the director of mobility forces,” provides planning, coordinating, tasking, and execution oversight of the “theater air mobility mission.”⁴⁴ The AMD is responsible for all missions within the theater that require mobility assets ranging from moving troops to evacuating injured soldiers.

The final AOC division is the intelligence, surveillance and reconnaissance (ISR) division. It supports all the previously mentioned AOC divisions by providing “predictive and actionable intelligence, ISR operations, and targeting in a manner that

⁴¹ AFI 13-1 Vol 3, *Operational Procedures-Air and Space Operations Center* (2005), 14.

⁴² AFI 13-1 Vol 3, *Operational Procedures-Air and Space Operations Center* (2005), 23.

⁴³ AFI 13-1 Vol 3, *Operational Procedures-Air and Space Operations Center* (2005), 38.

⁴⁴ AFI 13-1 Vol 3, *Operational Procedures-Air and Space Operations Center* (2005), 88.

drives the Air Tasking Cycle.”⁴⁵ This division influences all the other divisions by providing the critical information, which could be threats to air assets or new targets identified during the targeting process.

In addition to the five divisions, each service also has representation within the AOC. The Army representation is the Battlefield Coordination Detachment (BCD). The Marines coordinate through the Marine Liaison Officer (MARLO), while the Navy coordinates through the Naval Aviation Liaison Element (NALE). Finally, the Special Operations Forces arena is coordinated through the Special Operations Liaison Element (SOLE). The JFACC expects these liaison teams to articulate the requirements their parent command needs and to act as the points of contact to aid the functional component commanders to operate in a joint manner. The air component commander also has team members located with the other functional component commanders “to better integrate air and space operations with surface operations” through air component coordination element (ACCE) teams.”⁴⁶ For example, the air component commander in Al Udeid currently has an ACCE team in Baghdad to work issues within the Multinational Forces – Iraq AOR. These liaisons teams, both internal and external to the AOC, are critical elements to ensure the air component is meeting the needs of all components to achieve the strategic objectives established by the joint force commander.

Who makes up an AOC?

Manpower within the Air Force has been a constant source of concern. Often the call within the Air Force is that the service does not have enough people to fill the positions or that we are trading manpower in order to procure technology. These same concerns are valid within the AOC construct. In the past, the personnel that make up the divisions within an AOC have been acquired from a variety of sources and did not always have the opportunity to train together. To remedy this problem the Air Force has assigned a corresponding numbered air force (NAF) to each falconer AOC. Historically, the staffs of each NAF supplied the core of the personnel for each respective division.

However, during wartime operations this core falls short of the manpower required to run an expanded AOC and must be augmented. For example, AFCENT has

⁴⁵ AFI 13-1 Vol 3, *Operational Procedures-Air and Space Operations Center* (2005), 66.

⁴⁶ Air Force Doctrine Center Handbook 10-03, *Air Component Coordination Element Handbook* (2005), 1.

been in a mixture of sustained and major contingency operations since 1990. The 9th Air Force assigned personnel supplied the core for each division and when operations directed a need for additional personnel, other manning sources augmented the 9th Air Force personnel. Usually, either these additional sources were from other numbered air forces, Air National Guard, or Air Force Reserve trained AOC personnel. The Air Force has established a method to ensure each of its AOC have the core personnel present to function at the minimum level and with a backup plan to augment as the situation dictates.

When is an AOC established?

The Air Force has established standing AOCs for each AOR. Not all divisions of an AOC function around the clock, depending on the situation in the AOR. For example, an AOC may limit staffing to its air mobility and combat operations divisions if airlift assets are the only assets operating within the AOR. However, the AOC has the capability to establish full operations quickly based on the situation. The ability to provide an operational level command and control element exists although it may be in a limited status prior to a build up as a crisis escalates.

Where is an AOC located?

As previously mentioned, the Air Force currently has AOC located around the world to support each respective geographic combatant commander. The following is list of combatant commands and the location for their Falconer AOC operated by the United States Air Force:

United States Africa Command – Ramstein Air Force Base

United States Central Command - Al Udeid Air Force Base, Qatar

United States European Command – Ramstein Air Force Base, Germany

United States Pacific Command - Hickam Air Force Base, Hawaii

United States Northern Command - Tyndall Air Force Base, Florida

(CONUS) & Elmendorf Air Force Base, Alaska (Alaska AOR)

United States Southern Command - Davis Monthan Air Force Base, Arizona

United States Forces Korea – Osan Air Force Base, South Korea

The United States Air Force also runs AOCs that focus on a specific mission area. The AOCs are termed functional AOCs. The combatant commands and respective locations for their functional AOCs are:

United States Special Operations Command – Hurlburt Field, Florida

United States Strategic Command – Barksdale Air Force Base, Louisiana (Global Strike Missions), Vandenberg Air Force Base, California (Space Missions) and Lackland Air Force Base, Texas (Cyberspace Missions)

United States Transportation Command – Scott Air Force Base, Illinois

As the list above shows, the Air Force has postured itself to supply operational level command and control of air assets to each geographic AOR and a variety of unique mission areas when the need occurs.

The development of the AOC from the command and control experiences of Vietnam and Korea and Desert Storm continues today. This entity, which currently hosts the JFACC, is the senior element within the command and control structure to plan, operate, and assess air operations within an area of responsibility. The mistakes made in Korea and Vietnam provide the background to understand why the AOC exists today. The Air Force has been able to take those difficulties it experienced early in its existence as a series and translate them into a useful and practical tool for the JFACC to use to discharge his responsibilities.

Chapter 2

STANDARD AOC OPERATIONS

Operational level control of airpower has grown from being single service focused because of the intense interservice rivalry from the 1950s through the 1970s to a full fledge joint AOC. The growth of the AOC after Desert Storm and the experiences of the first true AOC commanded by General Horner are foundational. The cooperation among the services resulted in the recognition of the need for an AOC. Because of the demand for the AOC to be a common element within the theater air command and control structure, the need for doctrine soon followed as evident by Joint Publication 3-56.1 issued in 1994 with an early AOC model identified. Although this notional AOC organization, see figure 3, does not match the AOC organization of today the important step of achieving joint agreement on an AOC organization was accomplished.

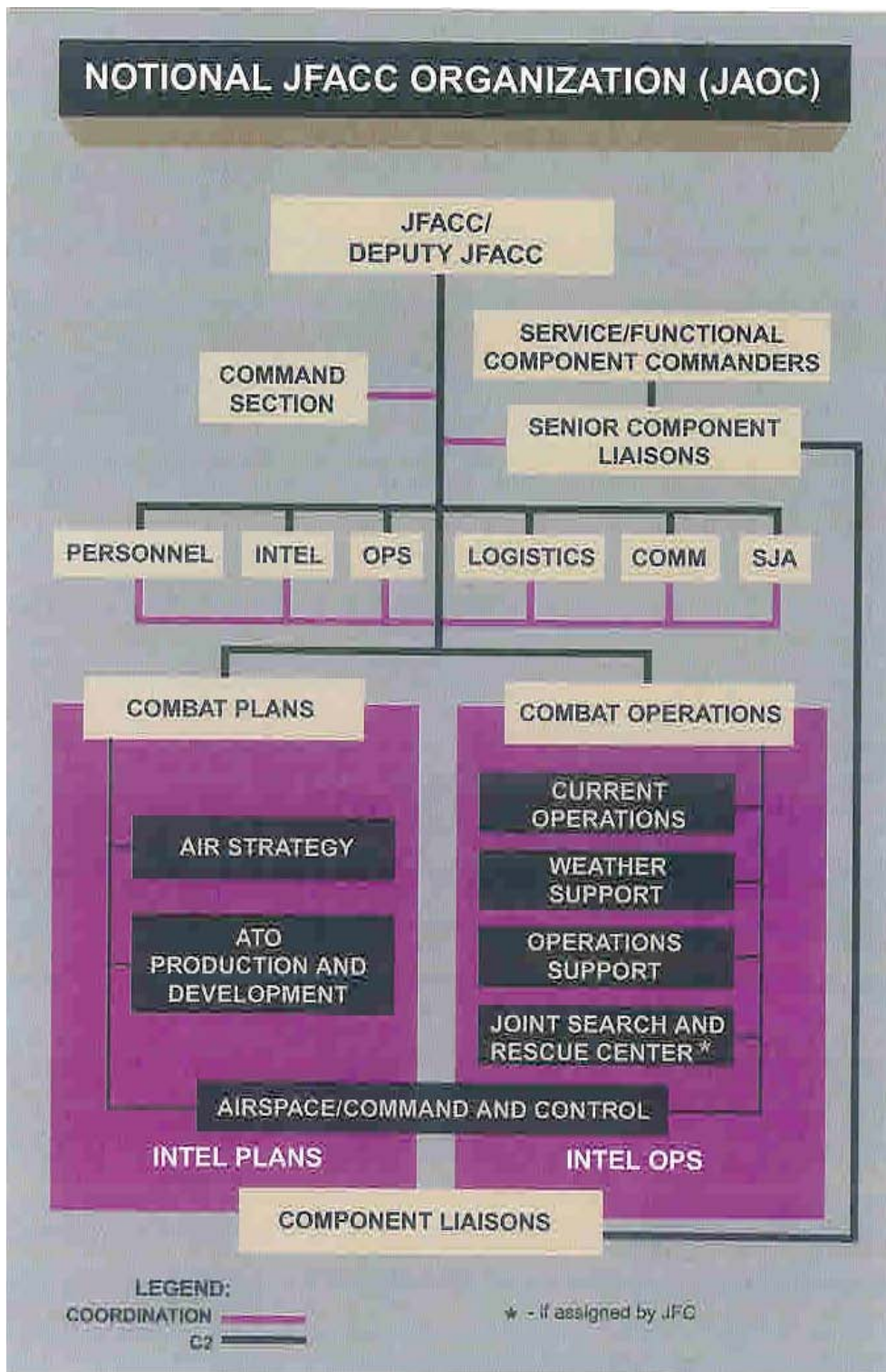


Figure 3. Notional JFACC Organization

Source: Reprinted from Joint Pub 3-56.1, Command and Control for Joint Air Operations (1994), II-6.

The formalization of the AOC supported by the doctrine eventually resulted in the declaration of the AOC as a weapon system.⁴⁷ These three key steps of AOC recognition, doctrine, and establishment of a weapon system, played an instrumental role in the AOC, as we know it today. This chapter examines the overall structure of the standard AOC, which includes all of its divisions in one geographic location, and its ability to produce, execute, and assess an air tasking order.

The results of Desert Storm left no doubt about the need for an AOC. Although the structures varied in the years immediately after Desert Storm, eventually the Air Force established (in 1998) a structure very similar to what is used today.⁴⁸ There have been cases along the way that have not followed the doctrine for a variety of reasons. For example, Operation Allied Force, which occurred in 1999, was expected by all to be a very short duration conflict. For this reason, and the fact it was a North Atlantic Treaty Organization backed mission, the AOC structure did not adhere to doctrine.⁴⁹ Therefore, the operations in Iraq and Afghanistan present the best case to look for standard AOC operations.

Another milestone occurred in September 2000 when Air Force Chief of Staff General Michael Ryan declared the AOC a weapon system.⁵⁰ This declaration brought standardization and training to the command and control element. Prior to the AOC being declared a weapon system, the structure and resources for an AOC were usually an ad hoc conglomeration to provide air support guided by whatever doctrine was available.⁵¹ This designation meant the AOC was now on par with all the other Air Force weapon systems, such as the F-16 or B-52, for funding and manning. This declaration by General Ryan planted the foundation for what the Air Force now has in established AOC structures around the world.

The Air Force validated the new AOC structure during Operations Enduring Freedom (OEF) and Iraqi Freedom (OIF). The examination of these two operations

⁴⁷ Katherine Gandara, "AOCs: Orchestrating Air Campaigns in Perfect Harmony," Air Force News, 1 August 2007, <http://www.afotec.af.mil/news/story.asp?id=123057900>

⁴⁸ Parker Northrup, "The Air Operations Center as a Weapons System: Thinking at the Operational Level of War", 37.

⁴⁹ Lieutenant Colonel Michael W. Kometer, *Command in Air War: Centralized Versus Decentralized Control of Combat Airpower* (Maxwell Air Force Base, AL: Air University Press, 2007), 161.

⁵⁰ Gandara, "AOCs: Orchestrating Air Campaigns in Perfect Harmony".

⁵¹ Northrup, "Air Operations Center as a Weapon System", 38.

identifies how the AOC operated in a time of conflict. Both of these operations are unique in what their joint force commanders tasked their AOCs to accomplish,

Table 1. OEF and OIF Objectives

OEF OBJECTIVES	
1	The destruction of terrorist training camps and infrastructure within Afghanistan
2	The Capture of al Qaeda leaders
3	The cessation of terrorist activities in Afghanistan
OIF OBJECTIVES	
1	Ending the regime of Saddam Hussein
2	To identify, isolate and eliminate Iraq's weapons of mass destruction
3	To search for, to capture and to drive out terrorists from the country
4	To collect intelligence related to terrorist networks
5	To collect such intelligence as is related to the global network of illicit weapons of mass destruction
6	To end sanctions and to immediately deliver humanitarian support to the displaced and to many needed citizens
7	To secure Iraq's oil fields and resources, which belong to the Iraqi people
8	To help the Iraqi people create conditions for a transition to a representative self-government

Source: Adapted from objectives obtained from the websites www.globalsecurity.org and www.heritage.org

Both of these operations had drastically different objectives that needed to be achieved in order to be successful, with OIF being the much larger endeavor, yet regardless of the size or focus of the operation, the AOC was a consistent element providing the capability to command and control air assets theater wide. The structure of the AOC stayed the same for both operations.

From an air perspective, OEF and OIF are interconnected because both are geographically located within the CENTCOM AOR. Although air combat for both began at different times, in both cases the AOC commanded and controlled air assets from one central point. OEF began in October 2001 when the Air Force launched air operations in Afghanistan. OIF combat started in March 2003, although some Air Force airmen would

argue that operations in Iraq never ended after DESERT STORM because of continuous operations in support of Southern Watch and Northern Watch. An important item to note here is the fact the Air Force supplied one commander for two different and geographically separated fights once OIF started in 2003.

In addition to commanding and controlling air operations over Iraq and Afghanistan, the COCOM tasked the CFACC to support the Global War on Terrorism (GWOT) with air operations conducted in the Horn of Africa (HOA) region. On the surface, this task would seem ill suited for one organization to accomplish, but because of the capabilities of the standard AOC, the CFACC supported all three of these operations. At this point, the CFACC planned air operations supporting three different regions in the AOR from one central location. During an interview Major General Maury Forsyth, the Deputy CFACC from June 2007 until June 2008, discussed the issue of the air component's ability to support all these operations simultaneously. He identified only one circumstance out of 4,837 requests when the CAOC failed to support ground forces requests for air support, observing that other higher priority tasking to ground forces prevented the accomplishment of the additional request.⁵²

This ability to support on-going operations clearly demonstrates two critical items concerning AOC capabilities. First, it shows the ability of a single AOC to support simultaneous operations in more than one region in a theater of operations. In this case, General Forsyth was responsible for operations in Iraq, Afghanistan, and the HOA. The AOC was able to accomplish this support for all three conflicts from one location without having to split its operations into multiple AOCs singularly tasked to each conflict. The establishment of an AOC for each conflict, Iraq, Afghanistan, and HOA, would have required the Air Force to establish an even larger footprint inside the forward operating area and directly countered the idea of centralized control of all air assets in an AOR under one airman.

The benefit of having one consolidated AOC commanded by a theater CFACC who is able to prioritize a limited resource--airplanes--and provide support where and when needed, based on priority, solves the puzzle of matching resources to needs. Lieutenant Colonel Clint Hinote, in *Centralized Control and Decentralized Execution*,

⁵² General Maurice H. Forsyth, Interview, 10 February 2009.

highlights the importance of this responsibility. Hinote states, “As one would expect, fighters in Iraq and Afghanistan tended to fly in their local areas (although small detachments of fighters could deploy from one country to the other in extreme circumstances). The CFACC, however, enjoyed great flexibility in directing fighters and bombers based between Iraq and Afghanistan. This was true for tankers also. These swing assets could range into either Iraq or Afghanistan on a given day.”⁵³ This evidence shows the importance of a single ACC for an AOR to direct those assets that can provide support throughout the AOR. Without this central authority to direct air operations across the AOR the possibility exist for degradation in the capabilities of air power and not prove beneficial to anyone because fewer requests for air support would be filled because of the inability to swing assets across the AOR. This dilemma provides the rationale for an overall theater-wide air component commander.

Another potential problem is a Joint Task Force (JTF) commander’s desire to have his own air component commander (ACC) and dedicated air assets directly assigned to the joint task force. If the JTF commander holds this desire, then he is guilty of being shortsighted in his point of view concerning air assets assigned to a JTF for several reasons. First, in accordance with joint doctrine, the ACC does not fall under the JTF unless it is the geographic combatant commander in that role or as directed by the combatant commander.⁵⁴

In addition, the CFACC while responsible to the combatant commander will support the JTF commander as directed by the combatant commander. This responsibility is identified in Joint Publication 3-30 Command and Control for Joint Air Operations, which states, “the JFACC conducts joint air operations in accordance with the JFC’s intent and CONOPS.”⁵⁵ The responsibilities that accompany the JFACC position are to “accomplish missions and tasks assigned by the JFC and normally operational control of forces assigned and tactical control over forces made available for

⁵³ Lieutenant Colonel Clint Hinote, *Centralized Control and Decentralized Execution: A Catchphrase in Crisis?* (Maxwell Air Force Base, AL: Air Force Research Institute, 2009), 26.

⁵⁴ Joint Publication 3-30, *Command and Control for Joint Air Operations* (2010), II-1.

⁵⁵ Joint Publication 3-30, *Command and Control for Joint Air Operations* (2010), II-2.

tasking.”⁵⁶ Figure 4 list the responsibilities for the JFACC as designated in Joint Publication 3-30.

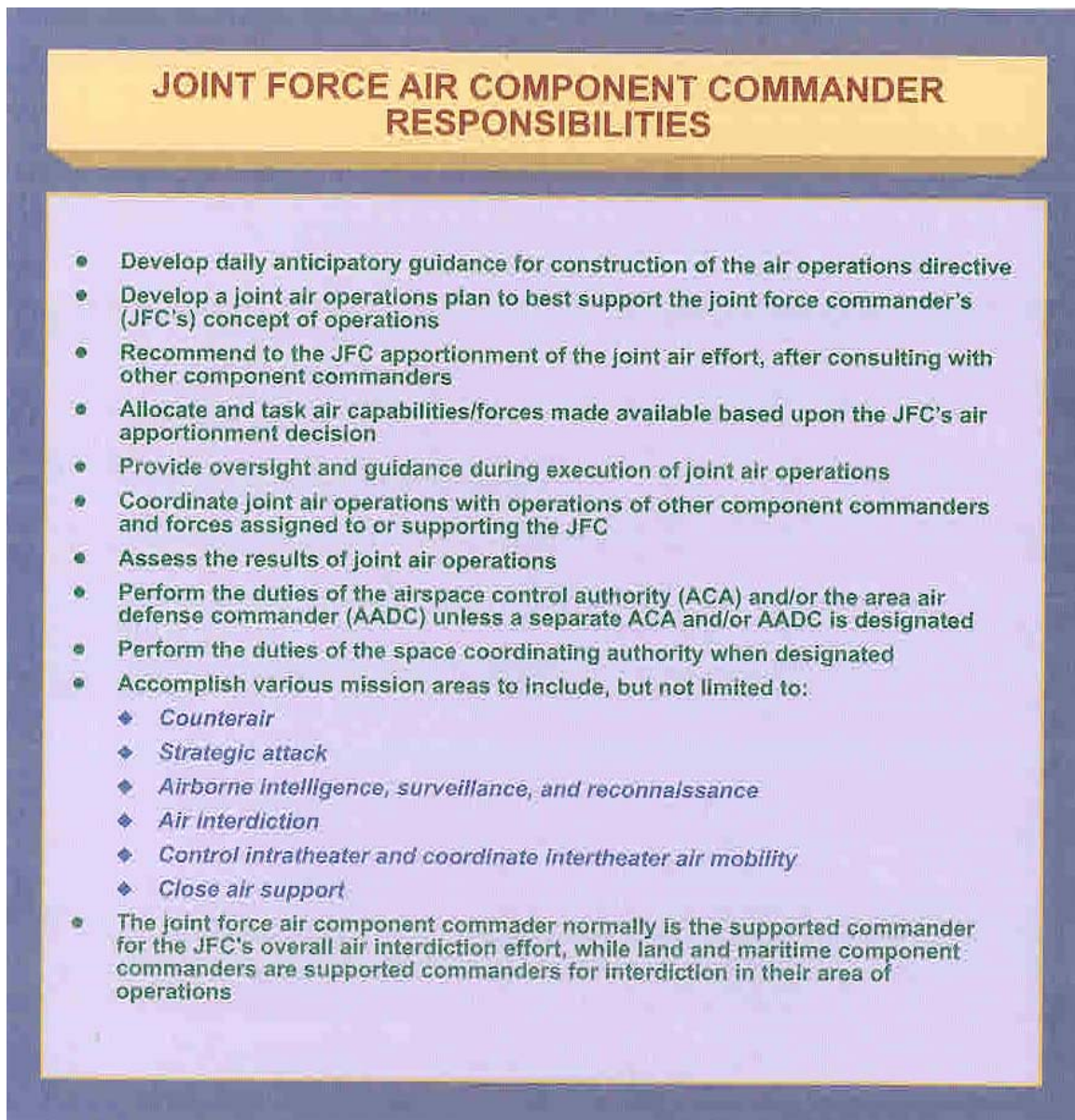


Figure 4. JFACC Responsibilities

Source: Reprinted from Joint Pub 3-30, *Command and Control for Joint Air Operations* (2010), II-3.

Another issue that presents challenges for the JTF commander is the limited air forces assigned for use. The whole purpose of a theater-wide ACC is to provide air assets around the theater based on need and priority. If the JTF is conducting the only

⁵⁶ Joint Publication 3-30, *Command and Control for Joint Air Operations* (2010), xi.

on-going conflict within the theater, then air assets availability may not be a problem as long as other external theater conflicts are not requiring assets, or have higher priority. JTF commanders must trust, especially when they do not have operational control of any air forces, that the theater ACC is tasking assets to support them within the constraints of other theater and/or global requirements. General Forsyth's explanation of the 99.98 percentage of air support requests fulfilled is evidence that the CFACC in the CENTCOM AOR took this responsibility seriously.

The issue of trust between the ACC and the JTF commander is one of the primary causes generating the issue of AOC restructures. The current wars have provided a few opportunities where component air and ground commanders failed to synchronize their operations, as well as they could have done. This lack of coordinated effort has resulted in increased distrust among the services as stated in *The New York Times* article, "the wars in Iraq and Afghanistan have frayed the relationship, with Army officers making increasingly vocal complaints that the Air Force is not pulling its weight."⁵⁷ Being the supporting component to skeptical ground commanders, the air component commander must show the land components that he is providing as much support as possible, in order to rebuild the trust between ground and air operations.

One could view the standard AOC structure as furthering the distrust between components because of geographic separation. The air component's location at Al Udeid Air Base, Qatar, hundreds of miles from the task forces in Iraq and Afghanistan, increases the disconnection between the air and ground components. The geographic separation is one cause often cited for the need to restructure the AOC. Some argue that the air component's location puts air assets out of the fight and increases the perception that air operations are not supporting the land component. Lieutenant General David Deptula, former CAOC Director and current Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance, echoed this notion in an interview when he stated, "virtual presence is actual absence."⁵⁸ General Deptula is not alone in this belief, as critics commonly throw this phrase around when discussing AOC operations.

⁵⁷ Thom Shanker, "At Odds With Air Force, Army Adds Its Own Aviation Unit" *The New York Times*. 22 June 2008.

⁵⁸ Lieutenant General Deptula, Interview, 13 April 2010.

One can blame, or at least partially blame, this disconnection between the two components on the lack of, or even negative, interpersonal relationships. The connection between commanders has long been a valued commodity when conducting operations. Geographical separation limits, to some degree, the ability to establish relations between the commanders. The Air Force's organizational structure contributes to this problem by having the NAF commander dual-hatted as the geographic JFACC. The responsibilities of both positions requires the NAF commander to ensure that the Air Force responsibilities of organizing, training, and equipping of service specific forces are accomplished while also maintaining the joint ACC responsibilities delegated from the JFC. Until the Air Force recently separated these functions for the 9AF/CENTCOM CFACC, the deputy combined air component commander (DJFACC) was the day-to-day executor of CFACC functions.⁵⁹ This organizational structure promotes the view that the Air Force is not totally committed, resulting in less trust between the two commanders than if the CFACC were present everyday within the walls of the AOC.

Another cry often heard around the AOC is that this predominantly Air Force entity is not flexible enough to support a constantly changing ground war. While critics abound, the criticism lacks documented proof. These complaints, or more often rumors, are often heard from the tactical level commander who requested air support and did not have his request fulfilled. The truth behind these complaints usually results from the JFC tasking limited air resources to support other higher priority ground operations.⁶⁰ Although the CFACC would like to support every air request, air resources are, and always will be, high-demand-low density assets. For example, an A-10's ability to accomplish close air support compared to a F-15C's ability to accomplish this task can cause confusion when ground forces just see a number of aircraft, yet are unsure of the type and capability.

The air component despite its many limitations has been able to adapt its operational level process based on the current conflicts. One example of how the AOC has adapted to the current conflict is with a shorter timeline to assign and task airplanes. This is a result of the type of conflict faced in OEF and OIF, and shows the adaptability

⁵⁹ Air Force News Website, "New leaders take command of redesignated AFCENT, 9th Air Force" (2009), <http://www.af.mil/news/story.asp?id=123162152>.

⁶⁰ Major General Forsyth, Interview, 10 February 2009.

of the AOC, depending on the campaign it is supporting. The standard 72-hour AOC planning cycle has been reduced to a 40-hour cycle based on the lack of predetermined targets currently residing in the CENTCOM AOR.⁶¹ As a result, the AOC has flexed its process to meet this change and is no longer going through the target effects team to assign targets and airplanes, but rather assigns the air resources for the flexibility of providing on call assistance, whether it be for an emerging target or to support troops in contact.⁶² The standard AOC structure is showing its capabilities to support the conflict without the divisions being broken apart to fit the conflict.

On the other hand, the air component developed another method for dealing with ISR assets in the current conflicts. The methods of securing the population while fighting insurgents in Iraq used by ground forces in the current counterinsurgency conflicts in Iraq drove the need for ISR assets to be dedicated to the lowest level.⁶³ This requirement is the result of ground forces operating in a decentralized manner driven by guidance in the United States Army counterinsurgency manual.⁶⁴ The Army Field Manual 3-24 directs the need to decentralize control while pushing capabilities to the lowest possible level.⁶⁵ The following of this doctrine by the ground forces resulted in the establishment of a unique relationship for air assets.

The air assets, in particular the ISR air assets, supporting operations in Iraq were organized differently than all other air assets supporting operations. The need for increased, timely, and accountable ISR at the lowest possible levels resulted in the assignment of ISR orbits directly to ground units.⁶⁶ This relationship aided the ground forces because they could now plan their operations knowing they had ISR assets supporting their ground movements.

The linking air ISR assets to lower echelon ground did not happen overnight. The changing face of the organizational structure played a major role in this command

⁶¹ Major General Forsyth, Interview, 10 February 2009.

⁶² Major General Forsyth, Interview, 10 February 2009.

⁶³ Raymond T. Odierno, Nichol E. Brooks, and Francesco P. Mastracchio, "ISR Evolution in the Iraqi Theater," *Joint Forces Quarterly*, no. 50 (3rd quarter 2008): 52.

⁶⁴ Odierno, "ISR Evolution in the Iraqi Theater," 52.

⁶⁵ United States Army Field Manual 3-24, *Counterinsurgency Field Manual* (Chicago, IL: The University of Chicago Press, 2007), 57.

⁶⁶ Dr. Larry Lewis, "Air Power in Counterinsurgency Targeting" Joint Center for Operational Analysis, 15 January 2008.

relationship establishment. The biggest organizational change that affected this relationship was the transition of control in Iraq from the CFLCC to a JTF commander, which occurred in May 2003.⁶⁷ The air component is now assigning ISR orbits to the ground forces when they are planning their operations so they are no longer concerned with not having the capability during operations.

This command and control arrangement, which is currently working very well in the current conflicts, is setting a dangerous precedent. Members of the ground forces, which are currently receiving this ISR dedicated support, are being taught that this is the method by which the air component should support them. However, the current conflict is a ground centric fight, which allows this irregular arrangement to work. The next conflict these ground forces engage in may not allow for this type of command and control arrangement because of higher priority requirements for ISR assets. The current method of allocating ISR assets to ground forces is setting the precedent for future conflicts. The ground forces now have an expectation for dedicated air assets to support them at the lowest level.

The Air Force identified the interpersonal relationship gap prior to OIF and developed an extension from the AOC to solve the problem. The AOC extension that exists to fulfill this role of communication and relations between the AOC and other elements as mentioned earlier is the ACCE. The Air Force developed the ACCE construct after “the air and land components realized they had not done a great job of coordinating during Operation Anaconda in Afghanistan.”⁶⁸ Because of the difficulties in Afghanistan between the two components, the air component organized a small team led by a general officer who would act as a liaison for the air component while living with the ground component. As stated by Major General Bentley Rayburn, “during Operation Iraqi Freedom we fielded several Air Component Coordination Element teams and they proved themselves in a trial by fire.”⁶⁹ However, this program is still a work in progress, as identified by Lieutenant Colonel Mark Douglas, 505th Training Squadron Commander from 2007 through 2009, who was responsible for all training of AOC personnel within the Air Force. “First, we have no training program other than the

⁶⁷ Lewis, “Air Power in Counterinsurgency Targeting”

⁶⁸ Kometer, *Command in Air War*, 141.

⁶⁹ Air Force Doctrine Center Handbook 10-03, *Air Component Coordination Element Handbook*, i.

individual training given to the ACCE director. Other ACCE members are not required (and usually do not have) operational level knowledge/experience. They are tactical level experts who have no training for the mission they are given. Without an understanding of AOC ops, the entire TACS structure and a working knowledge of ISR, space, cyber, and mobility capabilities, they will not be completely effective as representatives of the theater CFACC.”⁷⁰ The ACCE concept can “bridge the physical separation” while providing valuable information to both the air component and its fellow functional components if attention is paid to the qualifications and rank of its members.⁷¹

The air component has come a long way in developing the AOC structure. The problems of Korea and Vietnam are in the past. The recognition of the AOC by all services has made the command and control of air assets a joint operation. The doctrine that establishes the JFACC and the AOC are important steps in developing a solid foundation regardless of the type of conflict. The establishment of the AOC as a weapon system provides the needed dedication of resources to make this operational level element a standard expectation in the command and control architecture. The arguments calling for a change to the structure of the AOC, while lacking in evidence, must be recognized as a symptom that there are differences in perspectives that should be balanced through solid interpersonal relations. The standard AOC structure has proven itself in the current conflicts through flexible adaptation of its processes that produce an air tasking to meet the needs of those components it is supporting.

⁷⁰ Lieutenant Colonel Mark R. Douglas, e-mail, 16 March 2009.

⁷¹ AFDCH 10-03, *Air Component Coordination Element Handbook*, 1.

Chapter 3

SPLIT AOC OPERATIONS

The debate on how the Air Force should organize the AOC has pushed the idea of a split AOC to the forefront of operational level command and control issues. Another method of organizing an AOC, compared to the previous chapter, is through this split AOC concept. The structure would exist anytime the JFACC geographically separated division (or divisions) of the AOC from its main location. Although dependent on secure communications, this structure does provide the ability to place different divisions where they might better contribute to the overall campaign plan and operations by better gaining the perspective of the JFC. This concept could also eventually reduce the overall forward footprint, which is always of concern to the JFC when moving troops into the combat zone. One could even envision the extreme case where the AOC was actually located within the United States. However, the real problem remains the issue of mission effectiveness in supporting theater air operations.

The idea of a split AOC presents some difficulties not experienced with a standard AOC structure. Some of these problems include limits of technology, communication across AOC divisions, and impact to the other functional component commanders. Some argue that the ACC can handle all three of these problems on a case-by-case basis and with increased attention during the startup stages of establishing an AOC. However, as identified during Operation Deliberate Force and from numerous Air Force exercises, this ability has not proven to be the case.

In 1995, the United States Air Force engaged in air operations over Europe along with other NATO partners in Operation Deliberate Force. Although in this case, the CAOC structure differed slightly from the modern day organization, the result still mirrored what we currently see in modern day air operations centers. As stated in *Deliberate Force* by Colonel Robert Owen, “the CAOC was the focal point of all NATO air activity in the former Yugoslavia” and the CAOC produced a daily air tasking message, which is now known as the air tasking order (ATO).⁷² Responsible for all

⁷² Robert C. Owen, *Deliberate Force* (Maxwell Air Force Base, AL: Air University Press, 2000), 54.

operational and tactical level planning, the CAOC accomplished its responsibilities through the 72-hour planning cycle, consistent with processes in use today. The organizational structure that made this air campaign unique was the one established by the CFACC, then Lieutenant General Michael E. Ryan. Initially he decided to locate his Sixteenth Air Force (16 AF) staff with the CAOC in Vicenza, Italy, except for his strategy planning staff, which remained at Headquarters AIRSOUTH in Naples, Italy.⁷³ The plan was for the strategy team to remain separate from the rest of the AOC to avoid any groupthink situations.

The strategy team did eventually join the rest of the 16 AF AOC in Vicenza, the day prior to the initiation of air operations, when the strategy chief, Colonel Zoerb, assumed the role of AOC director.⁷⁴ While this initial separation provided the strategy team the ability to provide inputs to the CFACC that were not biased by on-going planning within the AOC, when the air operations became a reality, the strategy team was placed in the same location as the CFACC to ensure all AOC divisions were on the same sheet of music. This example demonstrates how some flexibility to the AOC structure can benefit pre-conflict planning. However, when operations start all planning, execution, and assessment entities should reside under the same roof. The following two examples, GOLDEN SABER and Joint Expeditionary Force Experiment (JEFX) 2008 show there are still issues to work when geographically separating AOC divisions.

Prior to Deliberate Force, the Air Force and Army conducted a series of exercises titled GOLDEN SABER, which practiced the air planning processes of the theater air control system (TACS).⁷⁵ This exercise series ran from 1979 until 1988, and planners focused on a conflict against the Soviet Union in the European Theater.⁷⁶ Although this exercise included the entire TACS, the AOC's performance is relevant, especially since it is the senior element of TACS. As noted in Maj Wight's paper, *Stretching the Umbilical Cord: The Theory, Practice and Future of the Split Air Operations Center*, the majority of the reports on GOLDEN SABER focused on the issues of communications within the

⁷³ Owen, *Deliberate Force*, 54.

⁷⁴ Owen, *Deliberate Force*, 110.

⁷⁵ Major Lee T. Wight, "Stretching the Umbilical Cord: The Theory, Practice and Future of the Split Air Operations Center", 43.

⁷⁶ Wight, "Stretching the Umbilical Cord", 44.

TACS elements.⁷⁷ Although this exercise occurred over twenty years ago, communication problems still reside in exercises today, such as JEFX 2008.

Although the communication problems themselves are of concern, a bigger concern is the environment in which these problems are occurring. The exercises were controlled, with all participating elements located within the United States. Yet the lessons learned from twenty years ago are still not being corrected. Although the problems may be technically different, they are still communication problems that are not allowing AOC planning and operations to be conducted as smoothly as possible.

JEFX 2008 exercised split AOC operations with the primary AOC at Langley Air Force Base, Virginia, and a forward AOC at Barksdale Air Force Base, Louisiana. The Navy Warfare Development Command viewed the overall experiment as a success. Nevertheless, highlighted in the report are problems such as “the primary voice collaboration, Adobe Connect, was unreliable due to network demands. The secondary voice collaboration tool, secure Voice Over IP, was unavailable due to a configuration change at USSTRATCOM AOC. Collaboration was more challenging than anticipated due to the requirements for point-to-point telephone calls, without speaker phones, to connect C2F MOC with other sites.”⁷⁸ During JEFX 2008 with even one of the five focus areas being “globally linked air and space operations centers,” exercise participants could not avoid communication problems.⁷⁹ The inability to establish solid communications within these exercises raises reasonable doubt that operators could establish reliable connections if they adopted the split AOC construct. Repercussions of this lack of reliable communications could result in the worst-case scenario: the AOC process halting due to lack of guidance from the geographically separated strategy division.

The technical difficulties identified by Major Wight in 1998 continue to exist today, even with upgrades in modern technology and practice in exercises. Some of the problems he identified include video teleconferencing difficulties (i.e. the system burping or lacking two-way communication capability), lack of secure telephones, and limited

⁷⁷ Wight, “Stretching the Umbilical Cord”, 45.

⁷⁸ Wendi B. Carpenter, “Navy’s Role in Joint Expeditionary Force Experiment 2008 Consolidated Experiment Report” (Norfolk, VA, 2008) 12.

⁷⁹ Captain Larry Van der Oord, “SECAF receives first hand look into JEFX 08-1” (Air Force Print News, 2007) http://www.gcic.af.mil/news/story_print.asp?id=123075952

information sharing.⁸⁰ Although not eliminated, planners and operators have reduced many of these previously noted problems using different forms of modern technology, which allows users almost uninterrupted communication around the globe.

For example, a chat room is now a common method of passing information within the AOC and planners can use these techniques to support a split AOC. Additionally, the use of chat rooms to post material for information sharing is now a common occurrence within an AOC, regardless of design, as different divisions now post their material for other divisions to use. Thus, some argue that technology is no longer a roadblock to conducting split AOC operations. Nevertheless, the evidence is clear, and has been for the past twenty years: communication technologies while available are not stable enough yet to allow the breaking apart of the AOC divisions and to overcome human obstacles.

The human element does and will always present an issue for conducting split AOC operations. There is a reason why ground combat commanders reside in Iraq and personally direct their chain of command in the conduct of military operations. –Their physical presence is still important to other leaders and followers throughout a military organization. It provides an intangible quality to those willing to put their life on the line that those tasking them to do so are putting themselves at the same risk. Additionally, AOC leaders provide physical presence in the planning and execution processes, which would be lost under a split AOC construct. The JFACC does not view his location in relation to his operational level forces any differently than the ground force commander's relationship with his forces. The commander's proximity to each respective force matters to those subordinate to them.

The Joint Space Operations Center (JSpOC), located at Vandenberg AFB in central California, presents an interesting reference to the discussion of split AOC operations. As the single AOC for space related operations, the joint commanders usually place the JSpOC in a supporting role attached to other AOCs around the world, for exercises and real world situations. Therefore, this functional AOC must count on technology to be involved in any operation when a joint force commander tasks it to provide reach back support. Although split AOC operations are different from reach back, the mechanisms used to provide support are the same. From a technological

⁸⁰ Wight, "Stretching the Umbilical Cord", 48.

standpoint, this entity uses VTCs and chat rooms to stay current with the situation and provide real time support.⁸¹ What is important to note here is their ability to support more than one area of operations at a time much like a theater JFACC. For example, the JSpOC has been supporting the conflicts in the Middle East since Desert Storm, but is still able to support an exercise in Pacific Command at the same time with the aid of technology.

One of the enduring requirements to accomplish this type of support is that joint commanders must allow this command and control node access to the same material as if they were co-located with the theater AOC.⁸² At times, it is the personal relationships between joint commanders that make the sharing of materials possible and not a limitation in technology. The members of each division must recognize that their counterpart is not just down the hallway, and make an effort to include those geographically separated in the planning effort. On the other side, those working outside the AOC must make concessions to include adjusting their daily work schedule to be available when the AOC is most in need of their expertise. In addition, JSpOC personnel must make a concerted effort to request information in the beginning, versus expecting the AOC to automatically push required information to them.

To aid in smoothing out this relationship, the Air Force has established a relatively new concept, which assigns a senior Air Force officer, or Director of Space Forces (DIRSPACEFOR) to the AOC. This officer possesses a space background and comes to the AOC with a staff to work real-time space issues. As explained in Air Force Doctrine Document 2-8, the DIRSPACEFOR “is the senior space operations advisor to the COMAFFOR.”⁸³ If technology were better able to provide the dedicated ability to collaboratively plan uninterrupted, then the AOC would not need to expand its footprint in theater, the JFACC could reduce the AOC footprint. However, the Air Force has decided to use this concept and provide on the scene space expertise.

Without a doubt, the idea of a split AOC does provide some benefit to air operations planning. If the strategy division were co-located with the JFC, air component

⁸¹ Major Todd Maser, Interview, 26 May 2010. Major Maser worked at the JSpOC in 2006 and with the JSpOC while deployed to Iraq as a member of the ACCE in 2008.

⁸² Maser, Interview, 26 May 2010.

⁸³ Air Force Doctrine Document 2-8, *Command and Control* (2001), 35.

planners would have the opportunity to receive face-to-face guidance, more interaction with the JFC staff, and more timely updates. The first benefit that the strategy division would expect to receive from being located with the JFC is the opportunity to receive guidance directly from the JFC. This would allow for direct communications from the JFC to the strategy division on what he expected from air operations, whether in a supported or supporting role. However, the question exists: does this need to occur if the JFACC is receiving the guidance from the JFC and then passing the information to the strategy division? In addition, would the JFC see the strategy division as one of his staff elements if they were co-located? To handle this situation, and to ensure the strategy division is accomplishing the guidance of the JFACC, either the JFACC or DJFACC would also need to be located with the JFC. However, this presents an issue for the other AOC divisions' ability to receive guidance from the JFACC and the strategy division. One or the other would have to link together via communication methods, which have proven to be unreliable in the benign exercise world.

In addition to the interaction with the JFC, the strategy division would also have the opportunity to interact more frequently with the JFC staff and, in particular, the J3 and J5. This opportunity could help prevent any confusion over guidance published by the JFC, because the strategy division could ask questions face to face versus over the phone or VTC, and should be able to get a more timely response, so that their efforts do not suffer from a lack of clarity. Additionally, the strategy division could provide better and timelier feedback when co-located and the assessment team could provide quicker feedback on what effect the JFACC achieved, enabling even better guidance from the JFC Commander.

Without a doubt, the planning process could improve because of this collocation of planning teams. For example, the JFC staff's campaign planning and design could become a shared commodity. Often the discussions that occur during the development of the campaign plan are the most valuable part of the process, yet unless the components are present, collaboration between staffs does not occur.⁸⁴ The relocation of the strategy division and their involvement in the campaign design process, even as silent bystanders could allow the Joint Air Operations Plan to match better the objectives the JFC planners

⁸⁴ 705th Training Squadron "Strategy Guidance Team" PowerPoint briefing.

envisioned for the campaign. It could also enable the air component to make better inputs to the campaign plan. This interaction could enable the AOC strategy division planners to have firsthand knowledge of the overall campaign plan resulting in a better supporting air plan without having to seek additional clarification.

Another factor to consider is the planning of those capabilities that have theater-wide impact, such as space and information operations. The JFC is designated the space coordinating authority for the area of responsibility and can delegate that task to the JFACC, but if the strategy division were located with the JFC then again they would have a clearer understanding of what he wanted to accomplish in that domain especially to support other component commanders.

In the information operations realm, there are currently multiple definitions for what is included in the information operations arena. From the Air Force perspective, as stated in Air Force Doctrine Document 2-5 information operations includes “the integrated employment of the capabilities of influence operations, electronic warfare operations, and network warfare operations, in concert with specified integrated control enablers, to influence, disrupt, corrupt, or usurp adversarial human and automated decision making while protecting our own.”⁸⁵ However the army considers information operations as stated in Field Manual 3-13 to encompass attacking adversary command and control (C2) systems (offensive IO) while protecting friendly C2 systems from adversary disruption (defensive IO).⁸⁶ The two services still debate what makes up information operations although both definitions include an offensive and defensive perspective.

Although the proximity would allow the opportunity to try to eliminate any confusion in this arena, it does not outweigh the costs of disassociating the strategy division from the rest of the AOC. Lost in this movement would be the ability to carry out the planning cycle from cradle to grave as is commonly done in AOCs around the world. Often one person carries the ATO football, as it is called, from strategy all the way through assessment. This practice provides continuity in the planning process and this option would not be available with a geographically separated strategy division.

⁸⁵ Air Force Doctrine Document 2-5, *Information Operations* (2005), 1.

⁸⁶ United States Army Field Manual 3-13, *Information Operations: Doctrine, Tactics, Techniques, and Procedures* (2003), V.

Additionally, the AOC processes do not work in a vacuum. The strategy division often discusses matters with other AOC divisions whether it is those accomplishing the MAAP or the air mobility division. Frequently the division centers these discussions on how to ensure that tasked units are following the CFACC's intent and that nothing was lost in translation during the planning process.⁸⁷ Again, geographic separation would degrade this collaboration between the AOC and its strategy division.⁸⁸

Another factor to consider would be the effect of split AOC operations on the other functional component commanders. As identified earlier, all the services/components have a representative element within the AOC. If the AOC starts to break apart their divisions, then where do these liaison elements need to reside to ensure the AOC understands their air support requests? These teams provide input to all divisions of the AOC and the CFACC's decision to move a division could result in these liaisons teams also moving which only decreases the overall effectiveness of the entire AOC.

Many view AOC split operations as a way to build stronger relationships with ground force commanders in Iraq and Afghanistan. At first glance, the idea of splitting the AOC seems like it could solve many problems such as building better relationships, better incorporation of air elements in the campaign plan, and more timely access to the JFC and staff agencies. However, the first glance is deceiving, as an examination of history has shown that, despite repeated exercises to test the concept of splitting the AOC, the communication infrastructure is not ready to support this without problems. In addition, the seams that exist among the AOC divisions would be further exposed and weakened because of an interpersonal relationship gap that would develop from the geographic separation. Although the benefits could aid some components the air component's planning, execution, and assessment processes would be weakened resulting in a potential downgrade of air support to the campaign plan.

⁸⁷ 705th Training Squadron, "Strategy Guidance Team", PowerPoint briefing

⁸⁸ Douglas H. Stutz, "Say What You Will, Coalition Slang is Not Just Alphabet Soup" (Navy News Stand, 2003), story Number NNS030402-13

Chapter 4

IMPLICATIONS FOR THE FUTURE

The perception of some in USCENTCOM is air assets could better support the current conflicts by restructuring the AOC. The tension between ground forces and air forces over air support prompts the concern over where AOC divisions are located. The Air Force's AOC structure is under attack to change but the real issue is how the air component achieves unity of effort of air assets. The AOC is the location where the entire air component's operational level work occurs. The AOC organization is not new—it was gradually developed by the experiences in Vietnam, Korea, Desert Storm, OIF, and OEF, which all provided the foundation for the modern AOC. The Air Force has taken a methodical approach to building the structure of the AOC from past lessons learned to achieve unity of effort. Although the Air Force has struggled at times to quickly learn and adopt the right lessons gained from experience, the current AOC structure has shown a great degree of success in previous wars. In fact, it has shown a significant ability to handle the current wars in Afghanistan and Iraq. However, there is no doubt that there is a perception of a mismatch between the way the ground forces and air forces are planning and controlling operations in these current wars. This does not necessarily mean the major command and control node needs to be reorganized.

Since the establishment of an independent Air Force in 1947, the services and joint community have failed to silence the command and control issue related to air operations. The Korean War was the first conflict where the new Air Force encountered problems on how it would command and control air assets at the operational level of war. For the majority of the Korean conflict, the services accomplished the command of air assets along institutional lines. The interservice rivalry that existed between the Navy and the Air Force resulted in numerous problems that hindered the overall effectiveness that air assets could have provided. Those problems included the Air Force's inability to gain recognition for its proposed command and control structure, lack of desired control of all air assets, and conflicting guidance on the priorities for the air assets to support.

In preparation for the Korean War, the Air Force experimented with and proposed a central node to command and control air assets. However, the Army and Navy did not support this command and control node and showed their noncooperation by not providing manpower to make it a joint command and control node. Although the Air Force desired to have a single commander responsible for all air assets that would conduct operations in the Korean theater, the other services again did not see the need. The Navy in particular was adamant that it would retain command and control of its air assets because it viewed its air assets as required to accomplish their mission.

The final issue concerning the command and control debate in the Korean War focused on the coordination of targeting. The targeting problem was an issue to avoid redundancy and affecting a coherent strategy. These difficulties experienced during the Korean War made the effective use of air power a struggle leading to more difficulties in the next conflict.

Similarly, the services struggled with concepts for the command and control of air assets during the Vietnam War. The lessons they should have learned during the Korean War did not translate into smooth air operations a decade later. The Air Force primarily focused itself on the mission of delivering nuclear weapons. The focus on the nuclear mission diverted attention on how the Air Force applied conventional forces. As a result, the struggles experienced in the Korean War manifested as all too familiar problems during the Vietnam War, seen in terms of interservice rivalry and in the lack of an established command and control structure.

However, the Air Force had internal problems as well. Even Air Force assets were not presented to the theater commander in a unified fashion. In particular, the Air Force did not organize all service assets under one commander in Vietnam as it did in Korea. Instead, the Air Force placed the tactical air assets under the theater commander but excluded the strategic bombers from this command structure. Strategic Command retained the command and control of bombers because of the overriding focus the Air Force had placed on the role of the nuclear mission. The Air Force focused on the nuclear delivery mission and viewed conflicts such as Vietnam as a precursor to a major conflict with the Soviet Union. Far from solving problems presented in the Korean War, the Air Force actually increased the issue of how to achieve unity of effort. However,

the next twenty years would show that the Air Force could eventually learn these lessons. The Goldwater-Nichols Act played a large role in the role of the services and the importance of the geographic combatant commander. The growth of the geographic combatant commander prompted the Air Force to establish geographic AOC to support each AOR. During the period between Vietnam and Desert Storm, the Air Force finally made some needed changes to the command and control of air assets.

The Air Force experienced great success in Desert Storm. Those individuals responsible for command and control of air assets incorporated the experiences of Vietnam and for the first time an AOC was established and the assignment of a JFACC occurred. The AOC produced an ATO, which directed the majority of air assets instead of the previous separation of services via geographic areas of responsibility. Additionally, the AOC was able to monitor execution and assess the effectiveness of air strikes, providing a more complete operational command and control function than experienced in Korea or Vietnam. These accomplishments by both the Air Force and other services show the willingness to learn from Vietnam and operate in a joint effort.

Since the conclusion of Desert Storm the operational level command and control structure has experienced some changes much like what occurred between Vietnam and Desert Storm. The development of pre-established AOCs around the world is one of the biggest changes. The Air Force has established this entity as the senior element within the command and control structure and the other services, while recently voicing disagreement with the structure, accept the overall premise of the need to operate in a joint fashion. One of the other big changes to interpersonal relations that impacts AOC operations involves the establishment of the ACCE. This entity provides the AOC the ability, if staffed and trained correctly, to better interact with the other components than ever before.

As a result of recent operations, the Air Force and other services raised questions concerning the need to change the AOC structure to better accommodate the ongoing conflicts in Iraq and Afghanistan. The examination of this issue raises some questions that Air Force leaders must address in order to understand where the service stands on its commitment to the AOC weapon system. The first question to examine is the most basic, which is, “does an AOC even need to exist?” This basic question provides a foundation

to understanding how the Air Force commits its self to command and control. The separation of the strategy division could be the first step of many to break apart the AOC resulting in a dramatic change to the operational level command and control landscape.

Without a doubt, the military as a whole needs an AOC. The AOC provides the opportunity to consolidate command and control at the operational level. The AOC as the evidence shows from the Korean and Vietnam wars provides solutions to many problems. The AOC provides the opportunity for joint air operations, flexibility in directing air assets, and coordination of targeting effort to name a few of the benefits. The effectiveness of air assets would be lost because of the lack of planning and assessment that occurs within the AOC. This area, especially assessment, is often criticized and forgotten but it provides a great capability to air assets. It provides the feedback to both planners and operators concerning the need to strike or re-strike targets. Without this capability, the air assets could very well be used unnecessarily to strike targets already destroyed or to re-strike targets already thought to be destroyed.

The services cannot ignore the current conflicts, but they also cannot provide the baseline for all future AOC structure. The current conflict presents some dynamics not previously experienced in the AOC environment. One of these dynamics is the issue of two conflicts occurring simultaneously in the same AOR. In this respect, the evidence shows the AOC has been extremely useful. At the operational level, the JFC and JFACC divide air assets between the two theaters based upon need and priority. While multiple AOCs would divide the air assets among the theater and any flexibility to use an asset in both theaters would become a coordination nightmare, the AOC makes this coordination routine. The AOC shows its importance in both these conflicts as air assets have continually provided flexible support based on situational needs.

The continued need for the air ISR assets to support ground forces is setting a dangerous precedent. Ground forces receive a tasked predator orbit for their operations. This type of tasking is reminiscent of the methods used prior to the establishment of an independent Air Force. Air assets assigned to ground units occurred in World War II. Although on the surface this type of command and control makes sense at the tactical level, discovery of flaws occurs when the practice is widespread. The assignment of air assets to specific units takes away from the command and control structure the Air Force

has long fought to develop and maintain since 1947. This structure has value to the Air Force from an organizational perspective but more importantly is the value it provides the JFC of using air assets in an effective and efficient manner.

The Air Force's growth in the ISR arena allows it to provide a much needed mission area to the ground forces. The air component's assignment of a dedicated orbit to a respective ground unit allows them to plan and conduct operations knowing they have this capability. This method of executing command and control while focused on the short-term mission is setting a dangerous precedent for future operations. This command and control arrangement removes the JFACC's allocation responsibility. This arrangement may work for this conflict but the problem is the precedent being set for future conflicts. Based on the arrangement of ISR assets the ground forces might expect the air planners to support them in the same manner with attack assets such as A-10s, which have a focused role in supporting ground combat. Although currently this logic may seem extreme, the precedent is being set in war. The Air Force needs to refocus how it commands and controls all air assets and not set bad practices now when air requirements for preplanned targets is low.

The use of an AOC to accomplish operational level command and control has shown its value over the past twenty years, ranging from Desert Storm to Operation Iraqi Freedom. The AOC provides a place to accomplish planning, execution, and assessment of joint air operations for an entire theater. The need for an AOC is without a doubt still there to bridge the gap between the strategic level guidance provided by the JFC and the tactical level units that will fly the missions.

The next question to ask when examining the usefulness of an AOC is location. The initial research question focused on the possibility of separating the AOC divisions via geography. The need to establish an AOC is clear but maybe the Air Force is locating AOCs in the wrong locations to support geographic combatant commanders, which is driving the initial research question. The established AOC provide a developed utility, which prevents the requirement to reestablish an AOC every time a new conflict occurs. Although they may not be fully manned, the Air Force has the mechanism in place to get the people in place in a timely fashion. The requirements, such as communication and computer systems, for a fully capable AOC realistically prevent the ad hoc establishment

of an AOC. The communication issues alone, as previously discussed concerning the split AOC structure, present a roadblock to anyone thinking an AOC should be able to relocate on a whim.

While the AOC locations are already established, the question remains concerning the relocation of the strategy division from the AOC to be collocated with either the JFC or another component. This idea certainly would provide a benefit to the JFC or other component commanders concerning communication and planning but the internal risks to the AOC are far greater. First, the communication architecture to ensure the strategy division can remain a part of the rest of the AOC exists but requires constant maintenance and a stable environment. The test of the split AOC structure in exercises in benign environments planned months in advance have yet to prove flawless. A geographically separated strategy division that is unable to communicate would result in the stagnation of the remainder of the AOC and air assets. The other issue to consider is the internal AOC structure. Regardless of technological developments to solve the communication issue the interworking of the AOC would be degraded. For much the same reasons the JFC or other components want the collocation of the strategy division the AOC has the same requirements. While each individual AOC division can accomplish their tasks independently, it is the inner workings among the divisions that provide value.

The interpersonal relationships among the divisions cover the biggest seam within an AOC. The passing of guidance by the strategy division to the combat plans division is not one-way action. The relationship between the two divisions and the ability to walk down a hall to communicate provide the strength needed to cover the AOC seams. Although on the surface, the idea of relocating a division seems like an easy process covered with a simple phone call back to the reminder of the AOC to pass direction it is not. Without a doubt, the strategy division is the most critical element of the AOC as it turns broad strategic direction from the JFC into actionable guidance for the remainder of the AOC divisions. In addition, the assessment piece that plays such a crucial role in development of guidance relies on the other AOC divisions for input.

The Air Force has put the right entity in place to solve any concern over air operations supporting ground forces in the current fight. The ACCE, if staffed and trained correctly by the Air Force, and utilized correctly by the other component

commanders, provides a solid extension of the AOC. The ACCE can provide feedback to the AOC without destroying the integrity of the planning process while also enhancing the interpersonal relationships between the air component commander and fellow component commanders.

The concern over the AOC structure for the current conflicts is valid. The evidence that supports this concern is flawed. The air component provides needed air support when required to the other components based on priorities established by the JFC. The relocation of the AOC's strategy division may make the other components more comfortable but the damage to the rest of the AOC may not make this perception a reality. The risks to the air component commander are too great to break apart his operational level command and control entity.

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